

Anti-SOD2/MnSOD antibody [EPR2560Y] ab68155

KO 評価済 リコンビナント RabMAb

★★★★★ [2 Abreviews](#) [55 References](#) [画像数 5](#)

製品の概要

製品名	Anti-SOD2/MnSOD antibody [EPR2560Y]
製品の詳細	Rabbit monoclonal [EPR2560Y] to SOD2/MnSOD
由来種	Rabbit
アプリケーション	適用あり: WB, IHC-P 適用なし: Flow Cyt, ICC/IF or IP
種交差性	交差種: Mouse, Rat, Human
免疫原	Synthetic peptide within Human SOD2/MnSOD aa 1-100 (N terminal). The exact sequence is proprietary.
ポジティブ・コントロール	WB: SH-SY5Y, A549, HEK-293T and HAP1 cell lysates; Human heart tissue; Rat brain and heart lysate. IHC-P: Human liver tissue sections. IHC-Fr: Rat lung tissue sections.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR2560Y

アイソタイプ

IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab68155の使用に適用されず**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (1)	1/1000 - 1/2000. Detects a band of approximately 25 kDa (predicted molecular weight: 25 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

追加情報

Is unsuitable for Flow Cyt, ICC/IF or IP.

ターゲット情報

機能

Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.

関連疾患

Genetic variation in SOD2 is associated with susceptibility to microvascular complications of diabetes type 6 (MVCD6) [MIM:612634]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis.

配列類似性

Belongs to the iron/manganese superoxide dismutase family.

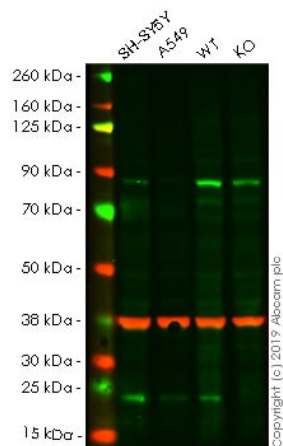
翻訳後修飾

Nitrated under oxidative stress. Nitration coupled with oxidation inhibits the catalytic activity.

細胞内局在

Mitochondrion matrix.

画像



Western blot - Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155)

All lanes : Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155) at 1/1000 dilution

Lane 1 : SHSY5Y cell lysate

Lane 2 : A549 cell lysate

Lane 3 : Wild-type HEK-293T cell lysate

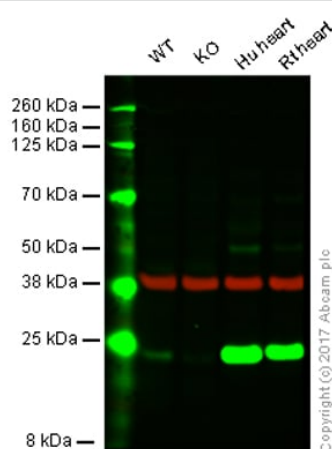
Lane 4 : SOD2 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 25 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab68155 observed at 22 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab68155 was shown to react with SOD2/MnSOD in wild-type HEK-293T. Loss of signal was observed when knockout cell line **ab255434** (knockout cell lysate **ab263835**) was used. Wild-type and SOD2/MnSOD knockout samples were subjected to SDS-PAGE. ab68155 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155)

All lanes : Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155) at 1/1000 dilution

Lane 1 : Wild-type HAP1 cell lysate

Lane 2 : SOD2 knockout HAP1 cell lysate

Lane 3 : Human heart tissue lysate

Lane 4 : Rat heart tissue lysate

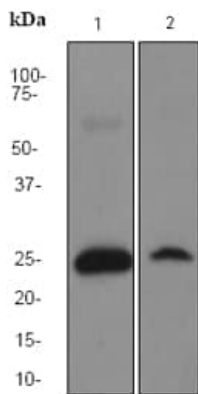
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 25 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab68155 observed at 29 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab68155 was shown to specifically react with SOD2 when SOD2 knockout samples were used. Wild-type and SOD2 knockout samples were subjected to SDS-PAGE. ab68155 and **ab8245** (loading control to GAPDH) were diluted at 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155)

All lanes : Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155) at 1/500 dilution

Lane 1 : Rat brain lysate

Lane 2 : SH-SY5Y lysate

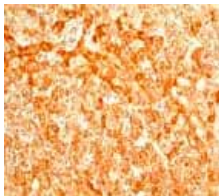
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 25 kDa

Observed band size: 25 kDa

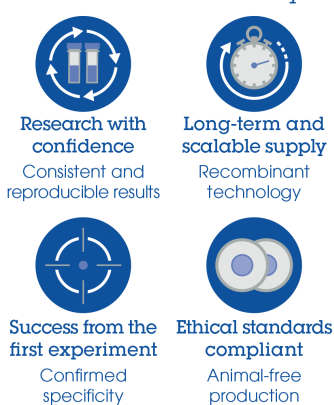


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155)

ab68155 at 1:100 dilution staining Superoxide Dismutase 2 in human liver tissue sections.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

Anti-SOD2/MnSOD antibody [EPR2560Y] (ab68155)

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